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Bugs! Bugs! Bugs!-Interpreting Insects for Children

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BUGS! BUGS! BUGS! -- INTERPRETING INSECTS FOR CHILDREN

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Curious and inquisitive children -- oh, how they love the bugs (insects) that hop, flutter and crawl. Ask youngsters about bugs and they will tell you bugs are "yucky" and "ugly" or "beautiful" or "soft" or "furry." That's one thing kids have in common: they all know about bugs. They may not know bugs (insects) have six legs and that many have antennae and two or four (or no) wings and that there are three main body parts (head, thorax, abdomen), but these are things you can convey while weaving your story.

Illustrating life stages

Children are fascinated by live insects and spiders. For example, mealworm cultures, easy to handle and maintain, provide a ready-made teaching/interpretive tool. Mealworms thrive on oatmeal, bran flakes, a little cornmeal, a few potato slices and an apple once in a while. The culture can be kept in a convenient place and used for a variety of purposes. You can show the life stages (larvae, pupae, adults) and tell that one form turns into the other. For insects to change, they must shed their external skeleton (exoskeleton). This process is called "molting" and the phenomenon of change is "metamorphosis." You would be amazed at the number of third graders that know this word and can spell it.

It is best for each child to see and touch the mealworms. To do this, simply sieve out the mealworms from their culture and give each child a few. These can be placed on their desks, in small plastic dishes or on paper plates. The children will ask questions, questions, questions! Be sure to show them the cast skins (molted exoskeletons), the different sizes (instars) of larvae and the different life stages.

Mealworm races

Then there are mealworm races. Get yourself an 18 inch diameter cardboard disc, a small plastic cup with about a 2 1/4 inch opening (Solo Cup 3 1/8 oz., P35A is the "official" starting cup) and it's off to the races! Here's how you do it: place the mealworms under the cup in the center of the cardboard; when everyone is ready, lift the cup and time the mealworms! The official record is 17.0 seconds set by Micah Poteet under supervised conditions. Once you lift the cup, no touching, blowing or handling the mealworms; no tapping or moving the disc. The mealworm must completely leave the disc for an official time to be recorded. The race can be repeated and awards given for the best peformance. This activity works for all age groups and the equipment is easy to set up and carry with you. I have done this activity with 250 Cub Scouts and each den did its best to cheer on its mealworms.

So you see, mealworms are entertaining, educational and pique the curiosity and enthusiasm of the children.

Grasshoppers are excellent for showing how to interpret the various body parts. Live specimens are best if you have them; preserved specimens are good for older youth (5th-6th grade) and paper grasshoppers (incredible insects) and pop-up grasshoppers work best for younger children (K-4th). To start with, ask how grasshoppers get

around. ("They hop, they hop.") So, you all hop like a grasshopper hops (hop; hop, hop; hop, hop). Next, how do grasshoppers see? ("Compound eyes," you say, placing your thumb and forefinger in a circle over your eyes.) And how do they feel things? ("With their antennae," you say, holding your arms above your head and wiggling your fingers.) What are the body regions of an insect? (Point to your head: HEAD! Point to your middle: THORAX! Point to your lower middle: ABDOMEN! Repeat: HEAD, THORAX, ABDOMEN.) How do grasshoppers get around? They hop! (Point to your legs and hop.) So there you go: I've got compound eyes (fingers over eyes) (I can't hear you!) I've got compound eyes! I've got two antennae (hands over head). I've got me a head! I've got me a thorax. I've got me an abdomen. (Point!) I've got great big legs (shake your legs) and I can hop! What am I? (I'm a grasshopper!) What am I? (I'm a grasshopper!) So . . . . . let's all hop like the grasshoppers hop!

Illustrating movement

How do other insects move? Butteflies flutter (raise your hands and flutter) and caterpillars crawl (you guessed it, crawl, crawl). So, everyone can take a turn being an insect of their choice. The types of insects can be divided up into hop (grasshopper), flutter (butterflies) and crawl (caterpillars) while learning aobut insect locomotion (whew).

If you have your tarantula with you, now is the time to share her with your group. Have everyone form a circle and carry your tarantula around to let everyone see. Be very careful and keep both her and your children safe. A wonderful person with tarantulas, millipedes, and scorpions is Alice Long from the Natural History Museum in New York. She holds her audience spellbound as she weaves her tales while caressing her tarantula and scorpion. The cockroach lady, Betty Farber, will dazzle you with her hissing roaches and tales from Trinidad.

You can end your session by a question/answer session on insects or show books, posters, insect homes or what have you. I carry along "Dr. Dave's Bug Bag" full of insect lore and activities. You can learn from the children as they learn from you. Seek out assistance and interaction from your group. One of my best assistants was the principal at Meade Elementary School in Philadelphia. He was a participant in all activities and added to the experience by encouraging participation by both the teachers and students. Ask questions and answer questions -- this helps you determine the vocabulary and level of your presentation.

Remember: show your enthusiasm, spark their curiosity. The rewards are from the children and for the feelings you generate. Good luck and remember the mealworms.